

**Pelletising ultrahigh-mol. wt. polyethylene - by extrusion agglomeration under pressure with given compression ratio, and then cutting into pellets****Patent number:** DE4210351**Publication date:** 1993-10-07**Inventor:** ONALLAH MAHER (DE); MATERNE WINFRIED (DE);  
SOBBE ANDREAS (DE); PAYER WOLFGANG DR (DE)**Applicant:** HOECHST AG (DE)**Classification:****- International:** B29B9/06; B29K23/00**- european:** B29B9/06**Application number:** DE19924210351 19920330**Priority number(s):** DE19924210351 19920330**Also published as:**

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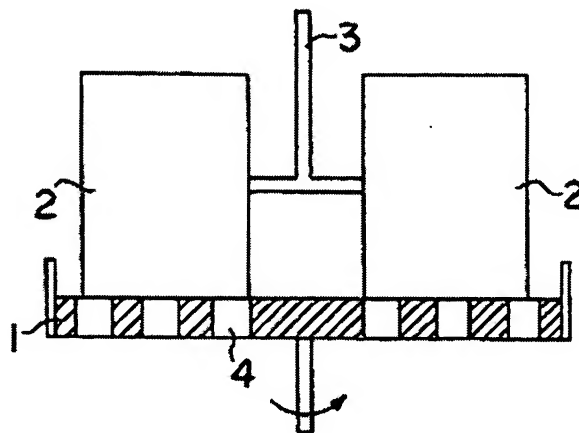
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**Abstract of DE4210351**

A process for pelletising ultrahigh-mol. wt. polyethylene (UHMWPE), alone or mixed with other types of PE, comprises compacting the powdered material by extrusion agglomeration under pressure at 100-150 deg.C with mean residence time in the press tool = 2-40 secs. and compression ratio = (1:5)-(1:15), and then cutting the extruded prod. into pellets of the required length.

Pref. agglomeration temp. is 110-130 deg.C residence time in the press tool is 5-10 secs. and compression ratio is (1:8)-(1:12). The press channel first tapers inwards and then ends in a cylindrical outlet.

USE/ADVANTAGE - Used e.g. for the prodn. of loom drivers, etc. for the textile industry, rollers, valves, sliders etc. in engineering, filter elements and HF insulators, etc. and for lining bunkers and conveyors, filter elements and HF insulators, etc. and for lining bunkers and conveyors etc. in mining. The process enables the prodn. of stable agglomerates from UHMWPE without damaging the material by high shear forces or high thermal loading.



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